



SEQUENCE LISTING

<110> Dragic, Tatjana
Olson, William C.

<120> SULFATED CCR5 PEPTIDES FOR HIV-1 INFECTION

<130> 61010-AB-1

<140> US 10/086,814

<141> 2002-02-28

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<170> PatentIn version 3.1

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<212> PRT

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Met Leu Val Ile Leu Ile Leu Ile Asn Cys Lys Arg Leu Lys Ser Met
50 55 60

Thr Asp Ile Tyr Leu Leu Asn Leu Ala Ile Ser Asp Leu Phe Phe Leu
65 70 75 80

Leu Thr Val Pro Phe Trp Ala His Tyr Ala Ala Ala Gln Trp Asp Phe
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Gly Asn Thr Met Cys Gln Leu Leu Thr Gly Leu Tyr Phe Ile Gly Phe
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Phe Ser Gly Ile Phe Phe Ile Ile Leu Leu Thr Ile Asp Arg Tyr Leu
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Ala Val Val His Ala Val Phe Ala Leu Lys Ala Arg Thr Val Thr Phe
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Gly Val Val Thr Ser Val Ile Thr Trp Val Val Ala Val Phe Ala Ser
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 180 185 190

Phe Gln Thr Leu Lys Ile Val Ile Leu Gly Leu Val Leu Pro Leu Leu
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Val Met Val Ile Cys Tyr Ser Gly Ile Leu Lys Thr Leu Leu Arg Cys
 210 215 220

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Asn Arg Leu Asp Gln Ala Met Gln Val Thr Glu Thr Leu Gly Met Thr
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His Cys Cys Ile Asn Pro Ile Ile Tyr Ala Phe Val Gly Glu Lys Phe
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<400> 15

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Xaa Xaa Tyr Asp Ile Asn Tyr Tyr Thr Ser Xaa Xaa
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<210> 18

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<210> 19

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more than 2 amino acids, they have a sequence identical to the sequence set forth in SEQ ID NO: 1 beginning with the Ile at position 9 and extending therefrom in the amino terminal direction.

<220>
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 <222> (7)..(8)
 <223> SULFATATION

<220>
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 <222> (11)..(11)
 <223> Xaa represents from 0 to 334 amino acids, where if there are more than 2 amino acids, they have a sequence identical to the sequence set forth in SEQ ID NO: 1 beginning with the Glu at position 18 and extending therefrom in the carboxy terminal direction.

<220>
 <221> MISC_FEATURE
 <222> (12)..(12)
 <223> Xaa is any amino acid

<400> 19

Xaa Xaa Tyr Asp Ile Asn Tyr Tyr Thr Ser Xaa Xaa
 1 5 10

<210> 20
 <211> 12
 <212> PRT
 <213> Homo sapiens

<220>
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 <223> Xaa is any amino acid

<220>
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 <223> ACETYLTATION

<220>
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 <223> Xaa represents from 0 to 9 amino acids, where if there are
 more than 2 amino acids, they have a sequence identical to the se
 quence set forth in SEQ ID NO: 1 beginning with the Ile at positi
 on 9 and extending therefrom in the amino terminal direction.

<220>
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 <223> SULFATATION

<220>
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 <222> (8)..(8)
 <223> SULFATATION

<220>
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 <222> (11)..(11)
 <223> Xaa represents from 0 to 334 amino acids, where if there ar
 e more than 2 amino acids, they have a sequence identical to the

sequen

ce set forth in SEQ ID NO: 1 beginning with the Glu at position 1
8 and extending therefrom in the carboxy terminal direction

<220>

<221> MISC_FEATURE

<222> (12)..(12)

<223> Xaa is any amino acid

<400> 20

Xaa	Xaa	Tyr	Asp	Ile	Asn	Tyr	Tyr	Thr	Ser	Xaa	Xaa
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<210> 21

<211> 12

<212> PRT

<213> Homo sapiens

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<222> (1)..(1)

<223> Xaa is any amino acid

<220>

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set forth in SEQ ID NO: 1 beginning with the Ile at position 9 and extending therefrom in the amino terminal direction.

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 <223> SULFATATION

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<220>
 <221> MISC_FEATURE
 <222> (12)..(12)
 <223> Xaa is any amino acid

<220>
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 <222> (12)..(12)
 <223> AMIDATION

<400> 21

Xaa Xaa Tyr Asp Ile Asn Tyr Tyr Thr Ser Xaa Xaa
 1 5 10

<210> 22

<211> 12
 <212> PRT
 <213> Homo sapiens

<220>
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 <223> Xaa is any amino acid

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<220>
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 <223> SULFATATION

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<220>
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<222> (12)..(12)
 <223> Xaa is any amino acid

<220>
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 <222> (12)..(12)
 <223> AMIDATION

<400> 22

Xaa	Xaa	Tyr	Asp	Ile	Asn	Tyr	Tyr	Thr	Ser	Xaa	Xaa
1				5					10		

<210> 23
 <211> 12
 <212> PRT
 <213> Homo sapiens

<220>
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 <223> Xaa is any amino acid

<220>
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 <222> (2)..(2)
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<220>
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<220>
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 <222> (12)..(12)
 <223> Xaa is any amino acid

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 <223> AMIDATION

<400> 23

Xaa Xaa Tyr Asp Ile Asn Tyr Tyr Thr Ser Xaa Xaa
 1 5 10

<210> 24
 <211> 12
 <212> PRT
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<220>
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 <223> Xaa is any amino acid

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 <223> ACETYLTATION

<220>
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 more t
 han 2 amino acids, they have a sequence identical to the se
 quence
 set forth in SEQ ID NO: 1 beginning with the Ile at positi
 on 9 a
 nd extending therefrom in the amino terminal direction.

<220>
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 <223> SULFATATION

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 <223> Xaa represents from 0 to 334 amino acids, where if there ar
 e more
 than 2 amino acids, they have a sequence identical to the

sequen

ce set forth in SEQ ID NO: 1 beginning with the Glu at position 1
8 and extending therefrom in the carboxy terminal direction

<220>

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<223> Xaa is any amino acid

<220>

<221> MOD_RES

<222> (12)..(12)

<223> AMIDATION

<400> 24

Xaa	Xaa	Tyr	Asp	Ile	Asn	Tyr	Tyr	Thr	Ser	Xaa	Xaa
1				5					10		

<210> 25

<211> 12

<212> PRT

<213> Homo sapiens

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<223> Xaa is any amino acid

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<222> (1)..(1)

<223> ACETYLTATION

<220>

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 <222> (2)..(2)
 <223> Xaa represents from 0 to 9 amino acids, where if there are
 more than 2 amino acids, they have a sequence identical to the se-
 quence set forth in SEQ ID NO: 1 beginning with the Ile at posi-
 tion 9 and extending therefrom in the amino terminal direction.

<220>
 <221> MOD_RES
 <222> (7)..(8)
 <223> SULFATATION

<220>
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 <222> (11)..(11)
 <223> Xaa represents from 0 to 334 amino acids, where if there are
 more than 2 amino acids, they have a sequence identical to the
 sequence set forth in SEQ ID NO: 1 beginning with the Glu at posi-
 tion 18 and extending therefrom in the carboxy terminal direction.

<220>
 <221> MISC_FEATURE
 <222> (12)..(12)
 <223> Xaa is any amino acid

<220>
 <221> MOD_RES
 <222> (12)..(12)
 <223> AMIDATION

<400> 25

Xaa Xaa Tyr Asp Ile Asn Tyr Tyr Thr Ser Xaa Xaa
1 5 10

<210>	26
<211>	12
<212>	PRT
<213>	Homo sapiens

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<220>
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<222>  (1)..(1)
<223>  Xaa is any amino acid
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<220>
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<222> (1) .. (1)
<223> ACETYLATION

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<223>  Xaa represents from 0 to 9 amino acids, where if there are
more t      han 2 amino acids, they have a sequence identical to the se
quence      set forth in SEQ ID NO: 1 beginning with the Ile at positi
on 9 a      nd extending therefrom in the amino terminal direction.

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<220>
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<223> SULFATATION
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<222> (8) . (8)
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<223> SULFATATION

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<223> Xaa represents from 0 to 334 amino acids, where if there are more

than 2 amino acids, they have a sequence identical to the sequence set forth in SEQ ID NO: 1 beginning with the Glu at position 1

8 and extending therefrom in the carboxy terminal direction

<220>

<221> MISC_FEATURE

<222> (12)..(12)

<223> Xaa is any amino acid

<220>

<221> MOD_RES

<222> (12)..(12)

<223> AMIDATION

<400> 26

Xaa	Xaa	Tyr	Asp	Ile	Asn	Tyr	Tyr	Thr	Ser	Xaa	Xaa
1				5					10		

<210> 27

<211> 17

<212> PRT

<213> Homo sapiens

<400> 27

Asp	Tyr	Gln	Val	Ser	Ser	Pro	Ile	Tyr	Asp	Ile	Asn	Tyr	Tyr	Thr	Ser
1				5					10					15	

Glu

<210> 28
 <211> 17
 <212> PRT
 <213> Homo sapiens

<220>
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 <223> SULFATATION

<220>
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 <222> (9)..(9)
 <223> SULFATATION

<220>
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 <222> (13)..(13)
 <223> SULFATATION

<400> 28

Asp	Tyr	Gln	Val	Ser	Ser	Pro	Ile	Tyr	Asp	Ile	Asn	Tyr	Tyr	Thr	Ser
1				5					10					15	

Glu

<210> 29
 <211> 17
 <212> PRT
 <213> Homo sapiens

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 <221> MOD_RES
 <222> (9)..(9)
 <223> SULFATATION

<220>
 <221> MOD_RES
 <222> (13)..(13)
 <223> SULFATATION

<400> 29

Asp	Tyr	Gln	Val	Ser	Ser	Pro	Ile	Tyr	Asp	Ile	Asn	Tyr	Tyr	Thr	Ser
1				5					10					15	

Glu

<210> 30
 <211> 21
 <212> PRT
 <213> Homo sapiens

<220>
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<220>
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 <222> (13)..(13)
 <223> SULFATATION

<220>
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 <222> (21)..(21)

<223> BIOTIN

<400> 30

Asp	Tyr	Gln	Val	Ser	Ser	Pro	Ile	Tyr	Asp	Ile	Asn	Tyr	Tyr	Thr	Ser
1				5					10					15	

Glu	Gly	Ala	Gly	Lys
			20	

<210> 31

<211> 17

<212> PRT

<213> Homo sapiens

<220>

<221> MOD_RES

<222> (9)..(9)

<223> SULFATATION

<400> 31

Asp	Tyr	Gln	Val	Ser	Ser	Pro	Ile	Tyr	Asp	Ile	Asn	Tyr	Tyr	Thr	Ser
1				5					10					15	

Glu

<210> 32

<211> 17

<212> PRT

<213> Homo sapiens

<220>

<221> MOD_RES

<222> (13)..(13)

<223> SULFATATION

<400> 32

Asp	Tyr	Gln	Val	Ser	Ser	Pro	Ile	Tyr	Asp	Ile	Asn	Tyr	Tyr	Thr	Ser
1				5					10					15	

Glu

<210> 33
 <211> 5
 <212> PRT
 <213> Homo sapiens

<220>
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 <223> SULFATATION

<220>
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 <222> (5)..(5)
 <223> SULFATATION

<400> 33

Tyr	Asp	Ile	Asn	Tyr
1			5	

<210> 34
 <211> 17
 <212> PRT
 <213> Homo sapiens

<220>
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<223> PHOSPHORYLATION

<220>

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<222> (9)..(9)

<223> PHOSPHORYLATION

<220>

<221> MOD_RES

<222> (13)..(13)

<223> PHOSPHORYLATION

<400> 34

Asp	Tyr	Gln	Val	Ser	Ser	Pro	Ile	Tyr	Asp	Ile	Asn	Tyr	Tyr	Thr	Ser
1				5					10					15	

Glu

<210> 35

<211> 17

<212> PRT

<213> Homo sapiens

<220>

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<222> (9)..(9)

<223> PHOSPHORYLATION

<220>

<221> MOD_RES

<222> (13)..(13)

<223> PHOSPHORYLATION

<400> 35

Asp Tyr Gln Val Ser Ser Pro Ile Tyr Asp Ile Asn Tyr Tyr Thr Ser
 1 5 10 15

Glu

<210> 36
 <211> 21
 <212> PRT
 <213> Homo sapiens

<220>
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 <222> (21)..(21)
 <223> BIOTIN

<400> 36

Asp Tyr Gln Val Ser Ser Pro Ile Tyr Asp Ile Asn Tyr Tyr Thr Ser
 1 5 10 15

Glu Gly Ala Gly Lys
 20

<210> 37

<211> 17
 <212> PRT
 <213> Homo sapiens

<220>
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 <222> (1)..(1)
 <223> SULFATATION

<220>
 <221> MOD_RES
 <222> (11)..(11)
 <223> SULFATATION

<400> 37

Tyr Val Ser Gln Pro Asp Asn Thr Tyr Ile Tyr Ser Tyr Glu Ser Ile
 1 5 10 15

Asp

<210> 38
 <211> 17
 <212> PRT
 <213> Homo sapiens

<220>
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 <222> (9)..(9)
 <223> SULFATATION

<220>
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 <222> (13)..(13)
 <223> SULFATATION

<400> 38

Ser	Ile	Asp	Ile	Tyr	Asn	Pro	Thr	Tyr	Val	Ser	Asn	Tyr	Glu	Ser	Asp
1				5					10					15	

Tyr